

TRCI Aquatic Life Sampling and Analysis – Phase 3

Report to NRM South, Tasmania.

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1. Background

Sampling for river condition assessment was conducted in three sub-catchments in September 2008 – the Lake, Flowerdale and Coal sub-catchments.

Assessments at eight sites in each sub-catchment were conducted for Aquatic Life with the purpose of reporting on Aquatic Life condition at each site and also for the whole sub-catchment.

In addition, the analytical and integration protocol for Aquatic Life was developed, fully constructed and implemented. This included:

- defining reference condition for the new components – native fish community composition, macroinvertebrate abundance, algal cover and chlorophyll-a.
- developing rules sets for deriving scores and ratings for individual metrics within each of the three components;
- developing an overall rule set for the integration of the three components (fish, macroinvertebrate algae) for the calculation of an overall aquatic life score and assigning a condition rating;
- constructing an Excel-based data entry and metric and index calculation tool.

This report describes the sampling conducted and results of assessments from the three catchments, and provides details on the development of the analysis and integration procedures for Aquatic Life, as well as responses to the Expert Panel comments on the Phase 2 Aquatic Life TR I report.